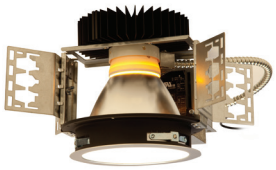
Lumination™ LED Luminaires

Downlights Powered by Infusion™
DI6R - 6" Round Aperture



Project name _____
Date _____
Type _____

Product Description:

Lumination DI Series LED downlights are powered by the Infusion™ downlight module for exceptional efficacy and color rendering. Designed for new construction applications, the DI6R is available in four color temperatures and five lumen packages, all with 90+ CRI. Matching custom engineered reflectors ensure a 45 degree cutoff. The twist-in Infusion DLM LED module allows for tool-free replacement and upgrade as LED technology advances, ensuring the lowest total cost of ownership.

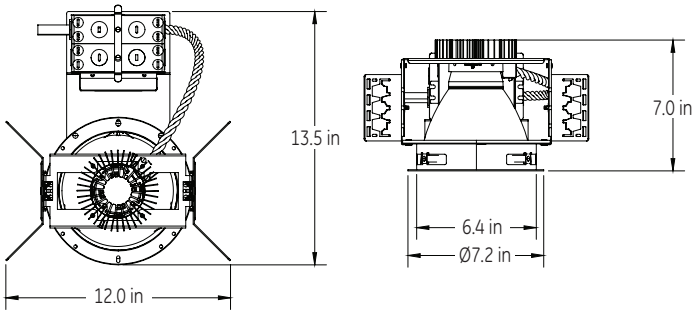
Targeted Performance Summary:

Distribution Patterns: Narrow, Wide
Input Voltage: 120, 277V, 347V
Standard Dimming Controls: 0-10V or Phase Dimming to 10%
CCT: 2700K, 3000K, 3500K, 4000K
CRI: 90
Color Consistency: 4 Step MacAdam Ellipse
Lifetime Rating: 50,000 Hours
Input Frequency (Hz): 60Hz
Power Factor: >0.9
Mounting Options: Hanger bars for grid or drywall ceilings
Weight: 6.1 lb
IC Rating: Non-IC Rated
Limited Warranty: 5 years system
Files Available: LM79, LM80, IES, Revit

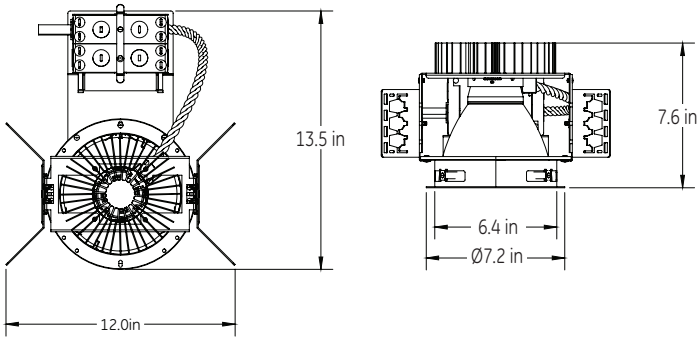
Nominal Module Lumens	1000	1500	2000	3000	4000
Delivered Lumen Output	830	1220	1650	2480	3250
System Input Power (W)	17	23	29	43	56
System Efficacy (LPW)	49	53	57	58	58
Emergency Mode Lumens	585	650	710	750	750

Product Dimensions:

DI6R (1000, 1500, 2000 lm)



DI6R (3000, 4000 lm)



Listings: cULus LISTED
- UL and cUL Listed.
- Suitable for damp locations.

Awards: Next Generation Luminaires 2014

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ENERGY STAR

Ordering Information: A complete fixture consists of a **Housing + Reflector**

For shortest lead times, order **standard reflector options shown in bold.**

1. Housing – Example: DI6R209351V10

D I 6 R _

LUMINAIRE SKU						
INTERNAL CODE	FIXTURE TYPE	MODULE LUMEN OUTPUT	CRI/CCT	VOLTAGE	DRIVER	OPTIONS
DI	**6R** = 6 inch round downlight	**10** = 1000 LM **15** = 1500 LM **20** = 2000 LM **30** = 3000 LM **40** = 4000 LM	**927** = 90CRI, 2700K **930** = 90CRI, 3000K **935** = 90CRI, 3500K **940** = 90CRI, 4000K	**1V** = 120V **2V**[3] = 277V **3V** = 347V	**10** = 0-10V Dimming Driver **PH**[5] = Phase Dimming	**(blank)** = None **EL**[3,4] = Bodine Emergency Backup with Remote Test Switch

2. Reflector - Example: RDI6RWSDWT

R DI6R _ _ _ _ _ _ _ _

REFLECTOR SKU					
REFLECTOR	HOUSING TYPE	BEAM SPREAD	REFLECTOR FINISH	REFLECTOR COLOR	FLANGE FINISH
R = Reflector	**DI6R** = 6" Round	**W** = Wide **N** = Narrow	**SD** = Semi-diffused **DF** = Diffused **SP** = Specular	**Blank** = Clear (no color) **WE**[1] = Wheat **PW**[1] = Pewter **GO**[1] = Gold **BL**[2] = Black **WT** = White Paint	**WT** = White Paint **MR** = Match Reflector

Accessories

ACCESSORIES	DESCRIPTION CODE	PRODUCT CODE
C-Channel Bar Hangers 25 1/4"	BH3	94890

Ordering Notes:

1. Wheat, pewter, and gold anodized reflector colors available in SD = Semi-Diffuse reflector finish only.
2. Black anodized reflectors available in DF = Diffused finish only.
3. 277V input, 1000 lumen version and all EL versions are not Energy Star certified.
4. EL option not available with 347V input voltage.
5. Phase dimming only available with 1000, 1500, and 2000 lumen packages.

imagination at work

Housing-Only Option

Lumination DI series fixtures without LED modules are stocked in GE distribution centers for quick shipment. These fixtures can be shipped directly to job sites for rough-in, and then later fitted with the appropriate Infusion LED module and trim kit to complete the installation. The unprecedented interchangeabiltiy and flexibility of the Infusion LED module makes this possible.

With the Housing-Only option, distributors can:

- Order just the housings for stock, and then complete the order with the appropriate Infusion LED module and reflector at a later date
- Order the stocked housing, module, and reflector all at once for a complete fixture in under 2 weeks

For the housing-only option: A complete fixture consists of a **Housing + Infusion LED Module + Reflector**

6" Round Housing-Only Fixtures & LED Modules

Downlight Housing-Only			Compatible LED Modules		
PRODUCT CODE	DESCRIPTION CODE	PRODUCT DESCRIPTION	PRODUCT CODE	DESCRIPTION CODE	PRODUCT DESCRIPTION
83630 **83632**	DI6RLL1V10HO DI6RLL2V10HO	6" Round Housing-Only, 120V, Low Lumen Platform, 0-10V 6" Round Housing-Only, 277V, Low Lumen Platform, 0-10V	**99607** **99608** **99609** **99610** **99611** **99612** **99613** **99614** **99615** **99616** **99617** **99618**	DLM1000/927 DLM1000/930 DLM1000/935 DLM1000/940 DLM1500/927 DLM1500/930 DLM1500/935 DLM1500/940 DLM2000/927 DLM2000/930 DLM2000/935 DLM2000/940	1000 LM, 90 CRI, 2700K 1000 LM, 90 CRI, 3000K 1000 LM, 90 CRI, 3500K 1000 LM, 90 CRI, 4000K 1500 LM, 90 CRI, 2700K 1500 LM, 90 CRI, 3000K 1500 LM, 90 CRI, 3500K 1500 LM, 90 CRI, 4000K 2000 LM, 90 CRI, 2700K 2000 LM, 90 CRI, 3000K 2000 LM, 90 CRI, 3500K 2000 LM, 90 CRI, 4000K
83633 **83638**	DI6RHL1V10HO DI6RHL2V10HO	6" Round Housing-Only, 120V, High Lumen Platform, 0-10V 6" Round Housing-Only, 277V, High Lumen Platform, 0-10V	**99619** **99620** **99621** **99622** **99623** **99624** **99625** **99626**	DLM3000/927 DLM3000/930 DLM3000/935 DLM3000/940 DLM4000/927 DLM4000/930 DLM4000/935 DLM4000/940	3000 LM, 90 CRI, 2700K 3000 LM, 90 CRI, 3000K 3000 LM, 90 CRI, 3500K 3000 LM, 90 CRI, 4000K 4000 LM, 90 CRI, 2700K 4000 LM, 90 CRI, 3000K 4000 LM, 90 CRI, 3500K 4000 LM, 90 CRI, 4000K

6" Round Stocked Reflectors

PRODUCT CODE	DESCRIPTION CODE	PRODUCT DESCRIPTION
93988	RDI6RNSDMR	6" Round Reflector, Narrow Distribution, Semi-Diffuse, Polished Flange
93989	RDI6RNSDWT	6" Round Reflector, Narrow Distribution, Semi-Diffuse, White Flange
93990	RDI6RWSDMR	6" Round Reflector, Wide Distribution, Semi-Diffuse, Polished Flange
93991	RDI6RWSDWT	6" Round Reflector, Wide Distribution, Semi-Diffuse, White Flange

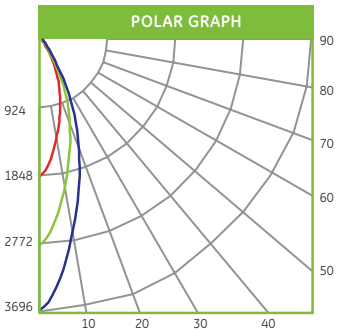
Photometric Data: Lumination™ DI6R Series Downlights

Narrow Distribution

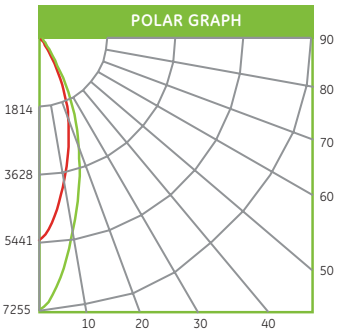
COEFFICIENTS OF UTILIZATION																		
RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	109	107	112	110	108	106	106	104	102	102	101	99	98	97	97	95
2	109	105	101	98	107	103	100	97	100	98	95	97	95	93	95	93	91	90
3	105	99	95	91	103	98	94	91	95	92	89	93	90	88	91	88	86	85
4	100	94	89	85	99	93	88	85	91	87	84	89	85	83	87	84	82	81
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	70	69
8	85	77	72	68	84	76	71	68	75	71	68	74	70	67	73	70	67	66
9	82	73	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	70	65	62	78	70	65	62	69	65	62	68	64	62	68	64	61	60

NOTE: Floor Cavity Reflectance : 20%

Narrow – 1000, 1500, 2000 Lm



Narrow – 3000, 4000 Lm



CANDLEPOWER SUMMARY

NOMINAL MODULE LUMENS					
	1000	1500	2000	3000	4000
Angle	Candela	Candela	Candela	Candela	Candela
0	1841	2717	3682	5523	7227
5	1698	2507	3397	5095	6668
10	1389	2050	2777	4166	5452
15	1101	1625	2202	3303	4323
20	833	1229	1665	2498	3268
25	601	887	1202	1803	2359
30	347	512	694	1041	1362
35	148	218	295	443	580
40	56	83	113	169	222
45	17	26	35	52	68
50	9	14	18	27	36
55	5	8	11	16	21
60	3	5	7	10	14

ZONAL LUMEN SUMMARY

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Zone	Lumens	Lumens	Lumens	Lumens	Lumens	% of Fixture
0 - 30°	716	1057	1432	2148	2811	85.7
0 - 40°	812	1198	1623	2435	3186	97.2
0 - 60°	832	1227	1663	2495	3264	99.6
0 - 90°	835	1232	1670	2505	3278	100

CONE OF LIGHT

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Height	fc	fc	fc	fc	fc	Dia. (ft.)
6'	51	75	102	153	201	3.9
8'	29	42	58	86	113	5.2
10'	18	27	37	55	72	6.5
12'	13	19	26	38	50	7.8
14'	9	14	19	28	37	9.1
16'	7	11	14	22	28	10.4
18'	6	8	11	17	22	11.7
20'	5	7	9	14	18	13.0

APPLICATION REFERENCE (Open Space)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' x 4'	53.6	1.08	79.0	1.50	107.1	1.92	141.5	2.58	185.1	3.36
6' x 6'	25.0	0.50	36.9	0.70	50.0	0.90	66.0	1.20	86.4	1.57
8' x 8'	13.4	0.27	19.8	0.38	26.8	0.48	35.4	0.65	46.3	0.84
10' x 10'	8.9	0.18	13.1	0.25	17.8	0.32	23.6	0.43	30.8	0.56
	10' ceiling, Open Space: 50' x 40' x 10'									

LLF: 1.0 Initial, 80/50/20 Reflectances, 2.5' workplane

20' ceiling, Open Space: 50' x 40' x 20'

APPLICATION REFERENCE (Corridor)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' on ctr.	25.8	0.75	38.1	1.04	51.6	1.33	55.2	1.79	72.2	2.33
6' on ctr.	17.6	0.51	25.9	0.71	35.1	0.91	37.5	1.22	49.1	1.59
8' on ctr.	12.4	0.36	18.3	0.50	24.8	0.64	26.4	0.86	34.5	1.12
10' on ctr.	10.3	0.30	15.2	0.42	20.6	0.53	22.1	0.72	28.9	0.93
	10' ceiling, Corridor: 6' W x 100' L						20' ceiling, Corridor: 6' W x 100' L			

LLF: 1.0 Initial, 80/50/20 Reflectances, Light levels on the ground

Spacing Criteria: DI6R - Narrow = 0.58

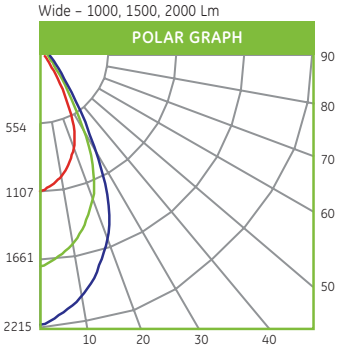
Photometric Data: Lumination™ DI6R Series Downlights

Wide Distribution

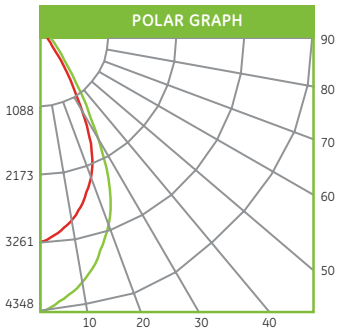
COEFFICIENTS OF UTILIZATION																		
RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	89	81	75	71	88	80	75	71	79	74	71	77	73	70	76	72	70	68
7	85	77	71	67	84	76	71	67	75	70	66	73	69	66	72	69	66	64
8	82	72	67	63	80	72	67	63	71	66	63	70	65	62	69	65	62	61
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	66	62	59	57
10	75	65	60	56	74	65	60	56	64	59	56	63	59	56	63	59	56	54

NOTE: Floor Cavity Reflectance : 20%

Wide – 1000, 1500, 2000 Lm



Wide – 3000, 4000 Lm



CANDLEPOWER SUMMARY

NOMINAL MODULE LUMENS					
	1000	1500	2000	3000	4000
Angle	Candela	Candela	Candela	Candela	Candela
0	1088	1606	2177	3265	4273
5	1067	1574	2133	3200	4188
10	1007	1486	2014	3021	3953
15	925	1366	1850	2776	3632
20	818	1207	1636	2453	3211
25	670	989	1340	2010	2630
30	433	639	866	1299	1699
35	213	314	426	639	836
40	94	139	188	282	368
45	37	55	74	111	145
50	19	29	39	58	76
55	11	16	22	33	43
60	6	9	13	19	25

ZONAL LUMEN SUMMARY

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Zone	Lumens	Lumens	Lumens	Lumens	Lumens	% of Fixture
0 - 30°	651	961	1302	1953	2556	78.9
0 - 40°	782	1153	1563	2345	3068	94.8
0 - 60°	820	1210	1640	2460	3219	99.4
0 - 90°	825	1218	1650	2475	3239	100

CONE OF LIGHT

NOMINAL MODULE LUMENS						
	1000	1500	2000	3000	4000	
Height	fc	fc	fc	fc	fc	Dia. (ft.)
6'	30	45	60	91	119	6.2
8'	17	25	34	51	67	8.2
10'	11	16	22	33	43	10.3
12'	8	11	15	23	30	12.3
14'	6	8	11	17	22	14.4
16'	4	6	9	13	17	16.4
18'	3	5	7	10	13	18.5
20'	3	4	5	8	11	20.6

APPLICATION REFERENCE (Open Space)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' x 4'	52.4	1.08	77.3	1.50	104.7	1.92	135.9	2.58	177.8	3.36
6' x 6'	24.5	0.50	36.1	0.70	48.9	0.90	63.5	1.20	83.0	1.57
8' x 8'	13.1	0.27	19.3	0.38	26.2	0.48	34.1	0.65	44.6	0.84
10' x 10'	8.8	0.18	12.9	0.25	17.5	0.32	22.7	0.43	29.6	0.56
	10' ceiling, Open Space: 50' x 40' x 10'						20' ceiling, Open Space: 50' x 40' x 20'			

LLF: 1.0 Initial, 80/50/20 Reflectances, 2.5' workplane

APPLICATION REFERENCE (Corridor)

NOMINAL MODULE LUMENS										
	1000		1500		2000		3000		4000	
Spacing	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²	Avg. fc	W/ft²
4' on ctr.	23.9	0.75	35.2	1.04	47.7	1.33	48.0	1.79	62.8	2.33
6' on ctr.	16.2	0.51	23.9	0.71	32.4	0.91	32.6	1.22	42.6	1.59
8' on ctr.	11.5	0.36	16.9	0.50	22.9	0.64	23.0	0.86	30.0	1.12
10' on ctr.	9.6	0.30	14.1	0.42	19.1	0.53	19.2	0.72	25.1	0.93
	10' ceiling, Corridor: 6' W x 100' L						20' ceiling, Corridor: 6' W x 100' L			

LLF: 1.0 Initial, 80/50/20 Reflectances, Light levels on the ground

Spacing Criteria: DI6R - Wide =.90

Product Specifications:

Construction:

- 16 gauge galvanized steel housing
- 16 gauge reflectors resist dents during transporation and installation
- Custom engineered heat sinks for passive cooling at all lumen options
- Galvanized steel junction box with multiple knockouts

Installation:

- Universal mounting brackets with over 3" of vertical adjustment accommodate several types of hanger bars
- Accommodates ceilings up to 1.5" thick
- Mount in T-bar grid or drywall ceilings
- LED module twists in at time of trim installation, preventing damage to module during ceiling installation

Optical System:

- Custom engineered reflectors for precise beam distributions and 45° cutoff to light source and source image
- Self-flanged design with white painted or reflector-matching trim
- Standard semi-diffuse finish for ideal combination of optical efficiency and low glare

Electrical System:

- Infusion DLM LED module for exceptional performance and tool-free upgradeability
- Standard 0-10V dimming, high efficiency drivers
- Thermal protection feature in module protects LEDs from overheating in abnormal conditions

For more information and access to all of our resources, including our design tool visit: www.gelighting.com

www.gelighting.com

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